Verifiers recognition kit – subclass 13.1

Version 1.0 – August 2018

Print double sided.
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</table>
Your recognition kit

This kit allows you to demonstrate your competence as a verifier of measuring instruments against the performance criteria set out in nationally recognised units of competency.

Please contact the NMI administrator in the following circumstances:

- You need assistance in understanding the requirements for compiling your kit.
- You have difficulties in obtaining access to instruments to test.
- You do not have a supervisor or industry mentor.

Email: NMI administrator@measurement.gov.au
Tel: 02 8467 3789

You have enrolled to be assessed for the following licence subclass:
- 13.1 Multi-dimensional measuring instruments

Important note:

For those who wish to verify instruments which incorporate a non-automatic weighing instrument (NAWI), you must hold a statement of attainment for competency to verify the appropriate subclass 6.1, 6.2 and / or 6.3 instrument. If you do not already hold the relevant statement(s) of attainment you will need to complete assessment for the relevant subclass.

Similarly, for those who wish to verify instruments which incorporate an automatic packaging conveyor weigher (package weigher), you must hold a statement of attainment for instrument subclass 6.7. If you do not already have that competency, you will need to complete assessment for subclass 6.7.

If you are completing this assessment simultaneously with assessment for subclass(es) 6.7 and/or 6.1, 6.2, and / or 6.3, you only need to complete the ‘All subclasses’ written assessment once. Ensure you complete the ‘All subclasses’ questions from this kit.

Note: you may also be able to use test reports for multi-dimensional measuring instruments towards assessment for 6.1-6.3 / 6.7 – see notes later.

On successful completion you will be awarded a statement of attainment for:

MSMSS00011 – Trade Measurement Verification (Simple Measuring Instrument)

- MSMTMREF301 – Use and maintain reference standards.
- MSMTMVER3012– Verify simple measuring instruments.

Assessment instructions

Before you complete this assessment

Before you complete and submit your recognition kit, you should have spent time in the field with an experienced verifier learning about:

- the instruments you intend to verify
- the techniques employed in carrying out testing including any required planning and preparation
- the methods of storing, maintaining and handling reference standards
- the environment in which they are situated and the potential impact of that environment on the function of the instruments and / or the standards you use to verify them
- the work health and safety considerations relevant to testing instruments
- your organisation’s and NMI’s requirements for recording and reporting details of verifications and other licensing matters
- any adjustments or corrections that you may need to employ in the verification process
- how to mark an instrument (what to mark and where to place the mark on the instrument)
- how you should communicate information about the instruments to the owner / user of the instruments or any assistance you may require from them
In addition, you should have had the opportunity to personally test instruments, under supervision, using the relevant national instrument test procedures to develop your skills - either in the workplace or in a simulated workplace environment.

Your supervisor / mentor should have personally observed you testing a minimum of three (3) instruments of subclasses 13.1. Where those instruments incorporate a NAWI or package weigher, those test reports may be used as some of the required test reports for the assessments for NAWIs / package weighers.

Your supervisor / mentor should have experience of the relevant, current, national instrument test procedures and be able to confirm that you have correctly followed those procedures.

In addition, they should have personally observed you selecting, calibrating, using and maintaining appropriate reference standards / equipment, in accordance with specified procedures, on at least 3 occasions in a real or simulated workplace environment.

If you don’t have access to an experienced supervisor / mentor, please contact the NMI administrator.

If more than one supervisor / mentor can provide evidence to support your assessment, then have each of them complete a separate report for inclusion with your submission.

Completion of the kit

The kit comprises a number of forms for you to complete, including:

- your work history
- a report from your supervisor / mentor
- completion of a verification form
- a number of written assessments – see earlier note regarding written assessments
- a test report question, where you complete a test report using data provided for you.

In addition, you will be required to provide copies of test reports and documents (if relevant) printed from instruments you have tested under supervision. You should have personally completed all the tests required for verification of those instruments.

You will be required to provide 3 test reports relating to dimensional measurement.

Try to include examples from instruments which did not meet the requirements for verification to demonstrate your understanding of unacceptable instrument performance.

Submission of the kit and enrolment

Once you have completed all relevant forms and the other required documents, you should scan all sides of the documents in the order shown in the kit plus the additional documents. Use the checklist on page 4 to ensure you have included all the documents required for your assessment.

Only scan the forms you have completed, not these instructions or any parts not relevant to your assessment. Email the scanned copy of your completed kit to nmiadministrator@measurement.gov.au and keep your original kit as your assessor will ask questions about your kit during the interview.

You are now ready to enrol!

Complete enrolment by choosing the appropriate subclass (es) under the header ‘Verifier and Weighbridge Operator Assessments (Recognition kits) on the NMI web page, then adding each subclass to the cart to enrol and pay by credit card. Further instructions for payment by purchase order are given on the website.
Assessment

Your assessor uses a number of forms on which to record the results of assessment for each part. The forms used by the assessor are included at the end of the kit for your information. Once your assessor receives your submitted material, they will:

- assess the submitted material
- determine if any further written evidence is required (you may be asked to provide additional information)
- contact your supervisor to clarify the details of their report (if required)
- determine whether an observation will be required of you verifying an instrument or instruments, to assist the assessment process (if so, they will contact you to make the necessary arrangements)
- contact you to arrange a mutually convenient time for a telephone interview to clarify any of the answers you provided, confirm your understanding, discuss the reports you submitted and ask any other questions to confirm your competency (may be combined with the observation assessment)
- advise you of the result of assessment and provide feedback
- record your results on the assessment recording form
- return the kit to our administrator for processing and confirmation of the result of your assessment, including posting out your statement of attainment, when successful.
# Assessment recording form (applicant)

## Applicant to complete this section

<table>
<thead>
<tr>
<th>Name: First</th>
<th>Middle</th>
<th>Family</th>
</tr>
</thead>
</table>

**Email address:**

**Telephone:**
- Work
- Mobile

**Name of supervisor / mentor:**

**Supervisor’s / mentor’s telephone number:**

**Supervisor’s / mentor’s email address:**

**Company name:**

**Check the subclass of instruments you are being assessed for:**
- ☐ 13.1 Multi-dimensional measuring instruments

**Checklist to ensure you have included all required components of this kit. Check all that apply:**
- ☐ Applicant’s work history
- ☐ Report from supervisor / mentor
- ☐ Written assessment (all subclasses)
- ☐ Written assessment (13.1)

**Completed verification form including:**
- ☐ 13.1 Multi-dimensional measuring instruments

**Completed test report question for:**
- ☐ 13.1 Multi-dimensional measuring instruments

**Test reports from instrument tests you have completed in the workplace:**
- ☐ 13.1 Multi-dimensional measuring instruments

I verify that the work submitted in this kit has been completed by me and relates to activities I have completed personally.

**Applicant’s signature:**

**Date:**
## Assessment recording form (Assessor)

Assessor to complete this section and attach a separate page of feedback to the applicant

<table>
<thead>
<tr>
<th>Assessor name:</th>
<th>Date kit received:</th>
</tr>
</thead>
</table>

Summary of evidence used to assess the applicant:

- [ ] Written assessments
- [ ] Completed verification form(s)
- [ ] Review of test reports
- [ ] Report from supervisor / mentor
- [ ] Practical observation
- [ ] Questioning / structured interview
- [ ] Other – specify:

To obtain the skill set MSMSS00011 - Trade Measurement Verification (Simple Measuring Instrument), applicants must demonstrate competency in both units of competency.

<table>
<thead>
<tr>
<th>This applicant was assessed as:</th>
<th>Competent</th>
<th>Not yet competent</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSMTMVER302 Verify simple measuring instruments</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>MSMTMREF301 Use and maintain reference standards</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Check the subclass requested and whether they are competent or not yet competent:

<table>
<thead>
<tr>
<th>Competent</th>
<th>Not yet competent</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ 13.1 Multi-dimensional measuring instruments</td>
<td>☐</td>
</tr>
</tbody>
</table>

Applicant’s ID checked at interview: ☐

<table>
<thead>
<tr>
<th>Signature of assessor:</th>
<th>Date:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>RTO Manager’s signature:</th>
<th>Date:</th>
</tr>
</thead>
</table>
Applicant’s work history and training

Details of current employment

Organisation:

Postal address:

Period of employment (years):

Title of your current position:

Details of any previous relevant employment

Organisation:

Postal address:

Period of employment (years):

Title of your previous position:

Relevant work experience

Specify the length of time you have been testing these instruments, the type of instruments you have worked with, and the approximate number of instruments you have tested (including under supervision and in simulated workplace situations)

Detail any relevant training courses you have attended (name and date) and attach copies of any relevant trade qualifications:
Written assessment (all subclasses)

Instructions

For multiple choice questions, circle the correct answer, or answers. If you make a mistake, cross through any answers that you wish to change with a line and circle the new correct answer e.g. Q 3. What is the colour of my dog?

- Black
- Brown
- Brindle
- Spotty

For free text questions, space is provided below each question where your response should be written, including any calculations.

If you need more space, complete it on a separate piece of paper and identify the question as per the following example:

‘Written assessment – all subclasses Q4’

Questions

1. As part of the licence conditions, a servicing licensee is required to maintain a quality management system. From the following list, select each item that is included in your quality management system manual. Check all that apply.
   a) The requirement for all measuring instruments to be of an approved pattern and comply with their certificate of approval.
   b) Details of instrument reverification periods.
   c) References to the national instrument test procedures relevant to the servicing licence.
   d) Procedures relating to instruments that cannot be verified.

2. Which document, maintained by the servicing licensee, details the required format of the verification mark to be applied by verifiers working under that servicing licence? Choose the single correct answer.
   b) The licensee’s quality manual.
   c) The National Instrument Test Procedures.
   d) The licensee’s servicing licence.

3. What are the markings that you would apply to an instrument / measure you verified on 26 June 2016 if your servicing licensee code is DBA and you have the verifier number VR 01278? Choose the single correct answer.
   a) DBA 01278 F6
   b) 1278 F 16
   c) DBA1278F6
   d) 1278 DBA F16
4. Select the actions you would take when you test a measuring instrument / measure in use for trade and determine it cannot be verified. Check all that apply.
   a) Replace the verification mark with one indicating the instrument can no longer be used.
   b) Remove any existing verification mark (where feasible).
   c) Notify the owner within 14 days.
   d) Notify the owner immediately.
   e) Notify NMI within 14 days.
   f) Notify NMI immediately.

5. If you verify a measuring instrument or measure, how long do you have to submit notice of the verification to the National Measurement Institute on the approved form? Choose the single correct answer.
   a) 7 days.
   b) 14 days.
   c) 21 days.
   d) 1 month.

6. If you were unsure of the correct way to apply a verification mark on a measuring instrument / measure, or whether or not you should apply a seal, what would you do? Write your answer below.

   ________________________________
   ________________________________
   ________________________________
   ________________________________

7. How often must a measuring instrument / measure used for trade be re-verified? Choose the single correct answer.
   a) Whenever an adjustment or repair affects its metrological performance.
   b) Whenever it has been adjusted / repaired or every 2 years.
   c) Every 3 years.
   d) Every 5 years.

8. Can you verify a measuring instrument / measure where the certificate of approval states “cancelled in respect of new instruments as from 1 January 2014”? Choose the single correct answer.
   a) No, never.
   b) Yes, always.
   c) Yes, if the instrument / measure was manufactured before 1 January 2014.
   d) Yes, provided the instrument is new.
9. What could be the consequence if you failed to provide the trader with a notice of non-verification when you have been unable to verify a measuring instrument / measure used for trade? Check all that apply.
   a) No consequence, provided I told the trader they couldn't use the instrument / measure for trade.
   b) Customers could get incorrect measure.
   c) I could lose my job.
   d) Nothing, it's the trader's responsibility to check the instrument / measure is correctly marked.
   e) I could be fined.
   f) I could be restricted from verifying instruments / measures.

10. List the reference standards or equipment you use when verifying measuring instruments or measures? The answer you give should relate to all instrument subclasses for which you are being assessed. Write your answer below.

   __________________________________________________________

   __________________________________________________________

   __________________________________________________________

   __________________________________________________________

   __________________________________________________________

11. How do you protect the integrity of the reference standards and equipment you described in the previous question? Your answer should relate to storage, transportation and handling of reference standards and equipment. Write your answer below. Continue on a separate sheet of paper if required.

   __________________________________________________________

   __________________________________________________________

   __________________________________________________________

   __________________________________________________________

   __________________________________________________________
12. From the following list, choose the types of environmental factors that could influence the integrity of the reference standards and equipment that you use when verifying instruments / measures? The answer you give should relate to any instrument subclasses for which you are being assessed. Check all that apply.

   a) Temperature
   b) Humidity
   c) Electrical interference
   d) Wind
   e) Rain and water
   f) Gravity
   g) Dust and dirt
   h) Instrument level
   i) Pressure
   j) Other (detail):

   
   

13. How do you control these factors when undertaking a verification? The answer you give should relate to all instrument subclasses for which you are being assessed. Write your answer below.

   
   
   
   
   
   
   
   
   
   
   

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measurement.gov.au
14. You have damaged a reference standard used to verify measuring instruments / measures. What should you do with it? Choose the single correct answer.
a) Use it until it can be repaired.
b) Quarantine it and then use it once repaired, if it is repairable.
c) Quarantine it, until it has been repaired, tested and approved for use by the appropriate authority.

15. When using reference standards or equipment, what signs / symptoms / measurement results might alert you to a possible problem / fault / damage with those standards or equipment? Provide answers for each of the types of standards or equipment you use when verifying instruments of this / these subclass (es).
16. You have verified and marked a measuring instrument or measure when you realise that the reference standard or equipment that you used was damaged or faulty. What should you do with the verified instrument / measure? Write your answer below.


17. You have just changed your home address. What are you required to do? Choose the single correct answer.
   a) Nothing.
   b) Notify my employer who will notify NMI within 14 days.
   c) Notify my employer who will notify NMI within 2 months.
   d) Call my local trade measurement inspector and leave a message.

18. What does your quality management system require your organisation to do when there is a change to the reference standards you use, i.e. when you acquire new standards, when your standards are reverified, when you dispose of standards that are broken / excess to requirements? Check all that apply.
   a) Ensure new standards have the appropriate certification.
   b) Allocate a junior member of staff to clean the new standards.
   c) Update the list of reference standards.
   d) Supply a copy of the updated list of reference standards to NMI within 30 days of the change.
   e) Supply a copy of the updated list of reference standards to NMI within 14 days.
19. What are the main workplace health and safety hazards that you face when verifying a measuring instrument or measure? Your answer should relate to the verification of the instrument types for which you are currently being assessed. Write your answer below, continue on a separate sheet if required.

_________________________________________________________________________

_________________________________________________________________________

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_________________________________________________________________________
20. What do you do to minimise the risks from the hazards that you have identified when undertaking verification activities? Write your answer below. Continue on a separate sheet, if required.
21. Do you know what an SDS and a SWMS are? Explain in your own words and give examples of when you would use them.

22. The following questions relate to the connection of auxiliary devices to measuring equipment.

   a) Which document specifies the requirements for the installation of auxiliary indicating or printing devices and POS systems installed prior to 1 August, 2012? Choose the single correct answer.
      i. S1/0/A
      ii. S1/0B
      iii. Supplementary certificate of approval for the device / system
      iv. Measuring instrument approval

   b) Which document specifies the requirements for the installation of auxiliary indicating or printing devices installed after 1 August, 2012, excluding POS or Control systems? Choose the single correct answer.
      i. S1/0/A
      ii. S1/0B
      iii. Supplementary certificate of approval for the device / system
      iv. Measuring instrument approval

   c) Which document specifies the requirements for the installation of POS systems installed after 1 August, 2012? Choose the single correct answer.
      i. S1/0/A
      ii. S1/0B
      iii. Supplementary certificate of approval for the device / system
      iv. Measuring instrument approval
When verifying an instrument which has an auxiliary device (other than a POS or control system) connected to it, what are the requirements for verification marking? Choose the single correct answer. Choose the single correct answer.

i. Apply a mark to the instrument only
ii. Apply a mark to the auxiliary device only
iii. Apply a mark to both the auxiliary device and the instrument

Written assessment (Subclass 13.1 specific questions)
In these questions the abbreviation MDMI will be used for multi-dimensional measuring instrument.

1. What is the name, current version number and release date for the test procedure used to verify MDMIs? Choose the single correct answer.
   a) NITP 6.7 First edition – June 2010
   b) NITP 6.1 to 6.4 First edition, second revision – January 2014
   c) NITP 0 – First edition – February 2015
   d) NMI V 5-1 First edition - June 2010

2. What measuring instrument does the pattern approval number 13/1/23 relate to? Choose the single correct answer.
   a) Mettler Toledo Model SpaceWeigh 2000 Automatic Catchweighing and Dimensional Measuring Instrument
   b) Mettler Toledo Model CSN810 Dimensional Measuring Instrument
   c) Cubetape Model C190MFT Dimensional Measuring Instrument
   d) Scale Components Model PalletScan Dimensional Measuring Instrument

3. What is the model number of the instrument approved in certificate NMI number 13/1/15 that uses LoadScan ‘Load Volume Scanner’ version 3.0-xxx software? Choose the single correct answer.
   a) LMS511-20100
   b) LVS ‘Load Volume Scanner’
   c) LMS-221-30106
   d) LSV-3 ‘Load Volume Scanner’
   e) ____________________________

4. What do you understand by the term ‘dimensional weight’?
5. What are the maximum approved dimensions for an object that can be measured for trade using a MDMI approved by certificate of approval NMI 13/1/11? Choose the single correct answer.
   a) 2000 x 1000 x 1000 mm
   b) 200 x 100 x 160 cm
   c) 1100 x 700 x 700 mm
   d) 260 x 140 x 160 cm

5. Consider the regulation 13 certificate of verification on the next page and answer the following questions that relate to it.
   a) When do the reference standards expire? Choose the single correct answer.
      i. 4 July 2012
      ii. 4th July 2014
      iii. 6th July 2012
      iv. Never

   b) What maximum permissible uncertainty would apply to this reference standard measure, in accordance with the National Measurement Regulations 1999? Choose the single correct answer.
      i. ± 0.011%
      ii. ± 0.05%
      iii. ± 0.004%
      iv. ± 0.011 m

   c) What is the certificate reference number? Choose the single correct answer.
      i. Tape 2
      ii. RNABC123
      iii. ISO/IEC 17025
      iv. TMQ-332

   d) What conditions were applied to the measure during its verification?
CERTIFICATE OF VERIFICATION OF A REFERENCE STANDARD OF MEASUREMENT IN ACCORDANCE WITH REGULATION 13 OF THE NATIONAL MEASUREMENT REGULATIONS 1999 (Cth) IN ACCORDANCE WITH THE NATIONAL MEASUREMENT ACT 1960 (Cth)

Certificate Number KNABC123

Description of standard of measurement: Inspectors' Class 2 standard of length: Fabric tape measure, 11 m, graduated in one (1) m intervals from zero (0) to 11 m.

Permanent distinguishing marks: Serial No: Tape 2

Date of verification: 4 July 2012

This certificate is given for a period until: 4 July 2014

Value(s) of standard of measurement: Deemed equal to the denomination

Accuracy of verification: In accordance with Regulations 30 and 31

Relevant influence factors: Values calculated with an applied tension of 2 kg for a temperature of 20°C

Signature: [Signature]
Name: Mr John Gamble
Date: 6 July 2012

Signature: [Signature]
Name: Mr Greg Buckley
NATA Signatory
Date: 5 July 2012

Being a person with powers delegated by the Chief Metrologist acting under section 180 of the National Measurement Act 1960 (Cth) in respect of Regulation 13 of the National Measurement Regulations 1999 (Cth), I hereby certify that the above standard is verified as a reference standard of measurement in accordance with the Regulations.

This document may not be published except in full unless permission for the publication of an approved extract has been obtained in writing from the Chief Metrologist, National Measurement Institute

Trade Measurement Laboratory, Brisbane:
33 King William Place
Geelong QLD 4034
Australia

Telephone: +61 7 3613 6102
Facsimile: +61 7 3613 6198

Headquarters:
PO Box 264
Lindfield NSW 2070
Australia
Telephone: +61 2 8467 3600
6. Generally speaking, what are the requirements for test objects used for testing the dimensional aspects of MDMIs?

7. What uncertainty applies to the lengths of test objects to be used for testing the instrument approved as NMI 13/1/9? Choose the single correct answer.
   a) ≤ 1/5 MPE
   b) +2 mm
   c) 1/3 MPE
   d) d

8. Generally, how many test runs should be completed per test object as a minimum (single speed)? Choose the single correct answer.
   a) 1
   b) 3
   c) 5
   d) 10

9. Complete the MPE values for each dimension of an object measured by the MDMIs detailed in the table below:

<table>
<thead>
<tr>
<th>Instrument approval number</th>
<th>MPE (specify relevant unit of measurement) in mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>13/1/9</td>
<td></td>
</tr>
<tr>
<td>13/1/27</td>
<td></td>
</tr>
<tr>
<td>13/1/15</td>
<td></td>
</tr>
<tr>
<td>13/2/5</td>
<td></td>
</tr>
</tbody>
</table>
10. If verifying a new dimensional measuring instrument marked with the certificate of approval number 13/1/13 would the data plate shown below comply with the requirements?

Yes □ No □

Scale Components Pty Ltd
Model - VMD500-1000
Serial Number - XX21315
Year of manufacture 2005
NMI No. 13/1/13
Maximum dimensions 140 x 90 x 90 cm
Minimum dimensions 5 x 5 x 5 cm

Provide an explanation to support your answer.

_________________________________________________________________________________

_________________________________________________________________________________

_________________________________________________________________________________

11. You have just been employed by a licensee who holds a licence for instruments of subclasses 6.1-6.3, 6.7 and 13.1. You have obtained your statements of attainment for 6.1-6.3 but have yet to obtain a statement of attainment for instrument subclasses 13.1, but have repaired and installed such instruments on many occasions. Your manager asks you to repair and verify a multi-dimensional measuring instrument that has just broken down at a busy freight company’s premises who you maintain a lucrative service contract with, as the usual verifier is off sick. What should you do? Choose the single correct answer.

a) Repair and verify the instrument, using your verifier number.
b) Repair and verify the instrument, using the other verifier’s number
c) Repair the instrument and leave the site; the owner will know not to use the instrument until the regular verifier comes back to verify it, because it isn't marked with a verification mark.
d) Tell your employer that you are not competent to verify the instrument.
12. You are carrying out an annual accuracy check at a parcel courier that uses a number of MDMIs using some new test objects provided to you. You observe the same errors of measurement for all instruments when using the large test object. What might be the reason for this and what should you do?

13. During annual testing of instruments of pattern approval NMI 13/1/18, you notice that some of the MDMIs are being used to measure small postage items of maximum length 15 cm. Is this acceptable practice? Explain your answer and what you might do if it is not?

14. Which of the following would trigger the need to re-verify a MDMI? Check all that apply.

   a) Replacement of a worn data plate
   b) Calibration adjustment of instrument
   c) Replacement of one of the laser scanners.
   d) Repair to missing segments of the digital indicator
   e) All of the above
15. You are asked to verify a newly installed instrument of approval number NMI 13/1/13. List the physical tests you would complete and explain where you sourced these tests.

Verification form task
Download a Certificate of Verification or notice of non-verification of a measuring instrument form (Form 6) from the NMI website, for each subclass being assessed. Complete each form using the information given below.

Once you have completed the form(s), scan it /them and include with your submitted recognition kit.

For subclass 13.1

- Verification carried out at Fast-Trak Freight Pty Ltd, Unit 4, Airport Industrial Estate, Lancaster Rd, Darwin Airport, NT 0821
- Verification carried out on the 23/8/2018 by Ami Chan Verifier number VR-01111.
- Licensee is Kwik-Weigh Solutions Pty Ltd SL-0989, Licensee’s Mark is KWS. Licensee’s ABN is 434353536565
- Instrument Verified has approval number 13/1/19, with maximum package dimension of 250 x 120 x 150 cm, serial number M173356.
- Instrument was verified following a replacement of a faulty circuit board, detected after a breakdown.
Test report question

Subclass 13.1 Multi-dimensional measuring instruments

Complete the test report for a multi-dimensional measuring instrument (page 26), or use your own test report form, using the information provided.

Where any calculations are required to complete any parts of the test report, then complete the calculations so you can fully populate the test report form. At the bottom of the form state whether the instrument has passed or failed and give reasons for any failure.

Scan the completed form and include it with your recognition kit.

Assume that ALL tests required to be completed for the instrument for INITIAL verification have been carried out and passed, where not otherwise described below, and complete the form appropriately.

If you do not currently have a verifier number, use the verifier number VR-09999.

Details:
Verification carried out at Fast-Trak Freight Pty Ltd, Unit 4, Airport Industrial Estate, Lancaster Rd, Darwin Airport, NT 0821 on 23rd August 2018.

Contact person – Depot manager Jos Verbatim

Instrument owned by Fast-Trak Freight Pty Ltd, Level 4, 462 Grenfell St, Adelaide, SA 5000

Instrument verified – Mettler Toledo Model CSN910 FlexFlow Dimensional Measuring Instrument, approval number NMI 13/1/19, following replacement of faulty circuit board.

Test objects used: 10 x 10 x 10 cm; 80 x 50 X 20 cm; 150 X 100 x 50 cm; 250 x 120 x 150 cm.

Test objects checked with Lufkin 5 m tape with 1 mm scale interval verified on 14/6/2016, expiry 14 / 202, ID No. FTF13

Instrument data:

Visual inspection: All components are as per certificate of approval and the instrument is in good condition, with no adverse findings (No auxiliary device connected).

Data plate markings:

Pattern approval no. – NMI 13/1/19

Manufacturer’s mark – Mettler Toledo A/S

Model – CSN910

Year of manufacture 2011

Serial number - A123456

Maximum dimensions for each axis – 250 x 120 x 150 cm

Minimum dimensions for each axis – 10 x 10 x 10 cm

Maximum belt speed – up to 150 m/min

Minimum belt speed- - - - - - - m/min

Scale interval d = 1 cm
## Test results:

### Accuracy test

<table>
<thead>
<tr>
<th>Test Object</th>
<th>Measurement</th>
<th>Run number (Std. operating speed)</th>
<th>10 x 10 x 10 cm</th>
<th>80 x 50 x 20 cm</th>
<th>150 x 100 x 50 cm</th>
<th>250 x 120 x 150 cm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Length cm</td>
<td></td>
<td>10</td>
<td>80</td>
<td>150</td>
<td>250</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Width cm</td>
<td></td>
<td>10</td>
<td>50</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Height cm</td>
<td></td>
<td>10</td>
<td>20</td>
<td>50</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Volume dm³</td>
<td></td>
<td>1</td>
<td>80</td>
<td>750</td>
<td>4500</td>
</tr>
<tr>
<td></td>
<td>Length cm</td>
<td></td>
<td>10</td>
<td>50</td>
<td>150</td>
<td>250</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Width cm</td>
<td></td>
<td>10</td>
<td>20</td>
<td>50</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Height cm</td>
<td></td>
<td>10</td>
<td>79</td>
<td>100</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Volume dm³</td>
<td></td>
<td>1</td>
<td>79</td>
<td>750</td>
<td>4500</td>
</tr>
<tr>
<td></td>
<td>Length cm</td>
<td></td>
<td>10</td>
<td>20</td>
<td>150</td>
<td>250</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Width cm</td>
<td></td>
<td>10</td>
<td>80</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Height cm</td>
<td></td>
<td>9</td>
<td>50</td>
<td>50</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Volume dm³</td>
<td></td>
<td>1</td>
<td>80</td>
<td>750</td>
<td>4500</td>
</tr>
<tr>
<td></td>
<td>Length cm</td>
<td></td>
<td>10</td>
<td>80</td>
<td>150</td>
<td>250</td>
</tr>
<tr>
<td>Static check</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Width cm</td>
<td></td>
<td>10</td>
<td>50</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Height cm</td>
<td></td>
<td>10</td>
<td>20</td>
<td>50</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Volume dm³</td>
<td></td>
<td>1</td>
<td>80</td>
<td>750</td>
<td>4500</td>
</tr>
<tr>
<td></td>
<td>Length cm</td>
<td></td>
<td>10</td>
<td>79</td>
<td>148</td>
<td>247</td>
</tr>
<tr>
<td>Run at maximum operating speed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Width cm</td>
<td></td>
<td>10</td>
<td>49</td>
<td>98</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td>Height cm</td>
<td></td>
<td>10</td>
<td>20</td>
<td>49</td>
<td>148</td>
</tr>
<tr>
<td></td>
<td>Volume dm³</td>
<td></td>
<td>1</td>
<td>78</td>
<td>710</td>
<td>4314</td>
</tr>
</tbody>
</table>
Touching objects:
Placed 2 test objects on conveyor touching to determine if would sense as a single or 2 test objects – 2 correct readings provided.

Printed ticket checked, including a check of the output of the dimensional weight conversion for each test object, based on the company set conversion factor (1 m³ = cubic weight of 250 kg) – weights rounded to next whole kg.

Cubic weights printed for Run 1:

<table>
<thead>
<tr>
<th>Test Object No.</th>
<th>Cubic weight shown</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 kg</td>
</tr>
<tr>
<td>2</td>
<td>20 kg</td>
</tr>
<tr>
<td>3</td>
<td>187 kg</td>
</tr>
<tr>
<td>4</td>
<td>1125 kg</td>
</tr>
</tbody>
</table>

All other required tests found to be correct.

Include any additional information calculated from the data and determine whether the instrument has passed the required tests.
## Test Report – Multi-dimensional Measuring Instruments

Test report reference number .................................................. Date of test ..........................................

Type of test (tick one)  ☐ Verification  ☐ In-service inspection

For in-service inspection or reverification, record the verification mark: ..................................................

Name of owner/user ........................................................................................................................................

Address of owner/user ...................................................................................................................................

Name of contact person on premises ................................................................................................................

Address of instrument location ..........................................................................................................................

Description of instrument .....................................................................................................................................

Manufacturer ............................................. Model ..........................................................

Serial number ............................................. Certificate of Approval number ..........................................

### Details of the Reference (clause 2)

<table>
<thead>
<tr>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make (if applicable)</td>
</tr>
<tr>
<td>Model (if applicable)</td>
</tr>
<tr>
<td>Serial number</td>
</tr>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Reference certificate number (e.g. Regulation 13 certificate, etc.)</td>
</tr>
<tr>
<td>Certificate expiry date</td>
</tr>
</tbody>
</table>

### General Characteristics (clause 3.2)  

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Yes, no or N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the instrument comply with its Certificate(s) of Approval?</td>
<td></td>
</tr>
<tr>
<td>Is the instrument being used in an appropriate manner?</td>
<td></td>
</tr>
<tr>
<td>Are all mandatory descriptive markings clearly and permanently marked on the data plate?</td>
<td></td>
</tr>
<tr>
<td>If applicable, is the data plate fixed on the instrument?</td>
<td></td>
</tr>
<tr>
<td>Is the instrument complete?</td>
<td></td>
</tr>
<tr>
<td>Is the instrument clean?</td>
<td></td>
</tr>
<tr>
<td>Is the instrument operational?</td>
<td></td>
</tr>
<tr>
<td>Is the operation of the instrument free of any apparent obstructions?</td>
<td></td>
</tr>
<tr>
<td>If applicable, is the instrument securely mounted on a firm and level base?</td>
<td></td>
</tr>
<tr>
<td>Does the operator (and where applicable, the customer) have a clear and unobstructed view of the indicating device and the entire measuring process?</td>
<td></td>
</tr>
<tr>
<td>If applicable, is the instrument adequately protected against abnormal dust, air movement, vibrations, atmospheric conditions and any other influence likely to affect its performance?</td>
<td></td>
</tr>
</tbody>
</table>
Workplace test reports and documents

In your workplace you need to develop your skills by testing instruments of the subclasses for which you are being assessed under the supervision of an experienced, competent verifier. When completing tests, record your results in test reports using the template test report from the test procedure or the report used in your workplace.

For subclasses 13.1

From those test reports you have produced, select three (3) test report(s) that represent your best work and demonstrate your understanding of the test procedures, perhaps because the instrument failed the tests. Try to include reports of testing of different types of instrument.

If you are being simultaneously assessed for competency for any of the subclasses 6.1-6.3 and / or 6.7, then where a multi-dimensional measuring instrument incorporates instruments of those subclasses the report may also count towards the test report requirements for assessment of them.

If you are unsure as to the total number of test reports you need to submit, then please contact the NMI Administrator.

Scan the test report(s) /documents and include them with your completed recognition kit.

Once you have completed all your written assessments and test reports, ask your supervisor / mentor to complete the following form before you scan and email your whole kit to NMI.
Report of supervisor / mentor

We are seeking reports from a supervisor / mentor who works closely with the applicant and who can comment on his / her ability to verify measuring instruments / POS systems in accordance with statutory requirements either in the workplace or a simulated workplace environment. If the applicant has been supervised / mentored by a number of different people in different situations, each supervisor / mentor should complete this report.

You should complete all pages of this report, in particular, you must include written comments to support your responses in the checklist, particularly detailing how the applicant ensured safety for self and others and how well the applicant communicated with clients / colleagues in all situations.

We thank you for your contribution.

The applicant’s assessor may need to contact you to clarify your responses or to gain additional information where insufficient information is provided.

During the last 12 months I have observed the applicant (add name) test the undermentioned instruments in accordance with the National Instrument Test Procedures with close attention to detail and accuracy, while correctly selecting, using and handling the appropriate reference standards / equipment:

<table>
<thead>
<tr>
<th>Description</th>
<th>Yes</th>
<th>No</th>
<th>&lt;3</th>
<th>3+</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.1 simple dimensional measuring instruments (no weighing instrument components)</td>
<td>☐</td>
<td>☐</td>
<td>&lt;3</td>
<td>☐</td>
</tr>
<tr>
<td>13.1 multi-dimensional measuring instruments incorporating a non-automatic weighing instrument</td>
<td>☐</td>
<td>☐</td>
<td>&lt;3</td>
<td>☐</td>
</tr>
<tr>
<td>13.1 multi-dimensional measuring instruments incorporating an automatic packaging conveyor weigher</td>
<td>☐</td>
<td>☐</td>
<td>&lt;3</td>
<td>☐</td>
</tr>
</tbody>
</table>

In addition, the applicant has demonstrated to me on at least three occasions (in a simulated environment) how a verification label should be marked and where it should be applied to instruments of this / these subclasses |

Name of supervisor / mentor:

Signature:  
Date:

We thank you for your contribution.

The applicant’s assessor may need to contact you to clarify your responses or to gain additional information where insufficient information is provided.
<table>
<thead>
<tr>
<th>To your knowledge, does the applicant:</th>
<th>Yes</th>
<th>No</th>
<th>Not applicable or not able to comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• liaise with site management in planning site visits to ensure quality outcomes and minimise impacts on traders, their suppliers and employees?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• explain verification procedures and outcomes clearly to traders including communicating any inadequacies in the way traders use the instrument(s)?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• demonstrate professionalism and respect the rights of traders at all times?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• correctly select and ensure the suitability of reference standards / test equipment for the specific task?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• maintain the integrity of reference standards during their storage, transport and use?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• identify, access and correctly interpret and apply certificates of approval and verification?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• identify, access and correctly interpret and apply relevant test procedures?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• evaluate and adjust the impact of the operating environment on the performance of the instrument / standards?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• identify local hazards and apply appropriate safety precautions as relevant to the site?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• use reference equipment and conduct testing safely?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• use required calculations to determine the instrument performance result?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• apply appropriate maximum permissible errors?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• analyse test results to determine whether the instrument could be marked for trade use?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• mark instruments in accordance with the requirements for verification? (under supervision / in a simulated environment, if not already a verifier for other instrument subclasses)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• record, report and maintain test results and findings clearly, accurately and securely?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• understand the requirements for attaching printing and indicating devices to measuring instruments?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• work safely and effectively without close supervision?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• solve routine or unexpected problems and seek advice, when required?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**Name of supervisor / mentor:**

**Signature:**

**Date:**
Are you a verifier?

Yes ☐  No ☐  Verifier number:

Please describe briefly your level of experience in testing and verifying instruments of these subclasses:

For mentors, please describe your business relationship with the applicant:

Name of supervisor / mentor:

Signature:  Date:

Report of supervisor / mentor

Please provide comments to support the responses contained in this form (continue on a separate page, if required):
Record of assessors conversation with supervisor / mentor (If applicable)

Assessor’s signature: ___________________________ Date: ______________
Review of applicant’s test reports / labels / docket / transaction records
(to be completed by the assessor)

As part of your assessment, your assessor will use this form to record the accuracy of your submitted workplace documents.

Use the check boxes to record if the documents have been completed / evaluated correctly

<table>
<thead>
<tr>
<th>Instrument subclass</th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.1 multi-dimensional measuring instruments</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Please provide comments to support your findings on the submitted documents:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Assessor’s signature: _______________________________ Date: ____________
Record of interview with the applicant
(to be completed by the assessor)

As part of your assessment, you will have a conversation with your assessor who may ask questions to clarify your knowledge in the following areas. Your assessor will use this checklist to record your responses.

Use the check boxes to record where questions have been asked in relation to the following topics. It is not mandatory to ask questions for all topics if satisfactory evidence of competency has already been provided. Assessor to attach a list of questions with expected answers asked and responses given (Tick each correct answer provided or detail any incorrect response)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
<th>Not asked / not required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation, planning and communication with trader</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Using and maintaining reference standards and / or equipment</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Certificates of approval</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Operating environment</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Work, health and safety inc. use of SDS</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Maximum permissible errors</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Test procedures</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Test points</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Analysis of test results</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Marking instruments and verification documentation</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Auxiliary devices</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Reporting test results</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Inadequate use of instruments by trader</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Servicing licence documentation and procedures including maintaining confidentiality and security of data</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Applicant’s ID checked at interview: ☐

Assessor’s signature: ____________________________

Date: ___________
Practical observation report  
(to be completed by the assessor)

As part of your assessment, your assessor may observe you conducting a simulated verification of the instrument(s) subclasses / test procedures for which you are being assessed. Your assessor will contact you to discuss arrangements for this part of your assessment. Your assessor will use this checklist to record your ability to verify measuring instruments in accordance with legal requirements. Assessor to copy this form, as required, where more than one subclass is to be observed.

I have observed the applicant complete a verification test on the following instrument(s): (Include details of instrument(s) tested and dates / locations):

Use the check boxes to record your observations and attach an additional sheet, detailing your observations and how they provide evidence of the items checked below.

<table>
<thead>
<tr>
<th>Did the applicant:</th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>• liaise and communicate effectively with the trader prior to, during and after testing to ensure verification testing was carried out safely and with minimal disruption?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• select and validate the suitability of reference standards for the specific verification task?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• determine whether reference standards were suitable / defective?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• maintain the integrity of reference standards during their transport, storage and use?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• evaluate and adjust the impact of the operating environment on the performance of the instrument / standards?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• apply appropriate safety precautions and conduct testing safely?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• identify, access, interpret and apply certificates of approval and verification?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>• identify, access, interpret and apply relevant test procedures?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Assessor’s signature: 

Date:
## Practical observation report
(to be completed by the assessor)

- Use specified calculations to determine the performance result? ☐ ☐ ☐ ☐
- Apply appropriate maximum permissible errors? ☐ ☐ ☐ ☐
- Analyse test results to determine whether the instrument could be marked for trade use? ☐ ☐ ☐ ☐
- Report results and findings clearly and accurately? ☐ ☐ ☐ ☐
- Demonstrate how to apply the verification mark? ☐ ☐ ☐ ☐
- Identify and communicate any inadequacies in trader’s use of the instrument? ☐ ☐ ☐ ☐

**Assessor’s signature:**

**Date:**